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# Developing a research integrity promotion plan

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Austrian Agency for Research Integrity (OeAWI)

Twinning project

Supporting inter-sectoral collaboration possibilities between research and Industry

Tbilisi, 21 February 2023

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# Crisis of truth and trust

DROWSE

PU

# PLOS MEDICINE

#### OPEN ACCESS

ESSAY

#### Why Most Published Research Findings Are False

John P. A. Ioannidis

Published: August 30, 2005 • https://doi.org/10.1371/journal.pmed.0020124

Brief report

#### Please Commit More Blatant Academic Fraud

Posted on May 29, 2021

This week, I was thrilled to read about the first well-documented case of explicit academic fraud in the artificial intelligence community. I hope that this is the beginning of a trend, and that other researchers will be inspired by their example and follow up by engaging in even more blatant forms of fraud in the future.

#### The carnage of substandard research during the COVID-19 pandemic: a call for quality FREE

#### (b) Katrina A Bramstedt 1, 2

Correspondence to Professor Katrina A Bramstedt, Bond University Faculty of Health Sciences and Medicine, Gold Coast, Queensland, Australia; txbioethics@yahoo.com



2 % of scientists admitted to have

results at least once

OPEN 3 ACCESS Freely available online

#### How Many Scientists Fabricate and Falsify Research? A Systematic Review and Meta-Analysis of Survey Data

Daniele Fanelli\*

INNOGEN and ISSTI-Institute for the Study of Science, Technology & Innovation, The University of Edinburgh, Edinburgh, United Kingdom

fabricated, falsified or modified data or

Up to 34 % admit other questionable research practices (ORP)

14 % of scientists observed fabrication, falsification or modification done by colleagues Up to 72 % observed others doing questionable research practices (QRP)

21 studies included; "tip of the iceberg"

PLoS one

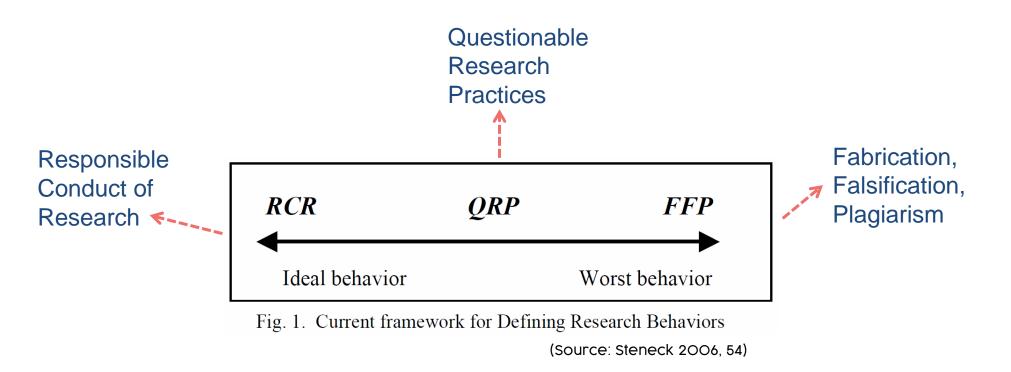
e5738. https://doi.org/10.1371/journal.pone.0005738

Fanelli D (2009)

PLoS ONE 4(5):



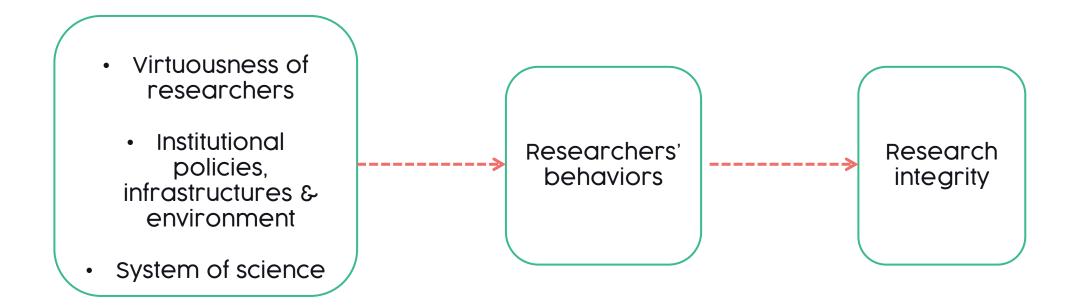
# (Ir)Responsible research practice



Most of the research integrity breaches are in the QRP zone



# **Factors influencing RI**



RI is not only the responsibility of individual researchers

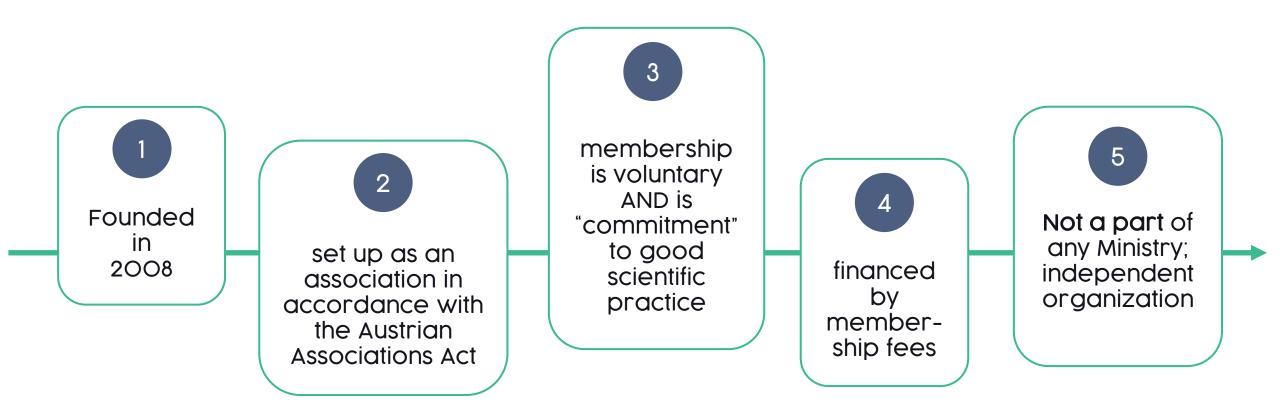


# Safeguarding Good Scientific Practice

# Setting the organisational framework

# Austrian Agency for Research Integrity

OeAWI





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**OeAWI** 





Administrative office:

- First point of contact in cases of alleged research misconduct
- Communication with all persons involved
- Support and Advising of the Commission (e.g. international context)



#### OeaWl

#### Commission

- Responsible for investigating cases of (alleged) research misconduct thoroughly and objectively.
- It constitutes an independent body and consists of renowned researchers, mainly from abroad
- It is responsible for cases in Austria, related to Austria or involving Austrian researchers
- Representing different fields: humanities, law, social sciences, life sciences, natural and technical sciences, economic sciences and medical sciences



# Tasks of the OeAWI

Focus on information and prevention

- Prevention & Raising Awareness
  (e.g. Training)
- Advising
- Investigation
- National & International Networking

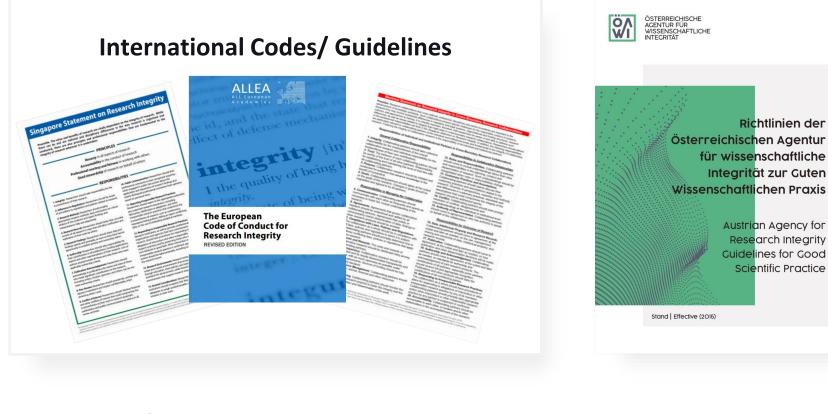




# Safeguarding Good Scientific Practice

# Setting the policy and regulatory framework

## **Codes / Guidelines**



#### Local Codes/ Guidelines

#### www.wcrif.org/guidance

www.allea.org

www.oeawi.at



### All European Academies (ALLEA) The European Code of Conduct

published in 2017 (2022/2023 under revision)



The European Code of Conduct for Research Integrity REVISED EDITION



Good research practices are based on fundamental principles of research integrity. They guide researchers in their work as well as in their engagement with the practical, ethical and intellectual challenges inherent in research.

These principles are:

• **Reliability** in ensuring the quality of research, reflected in the design, the methodology, the analysis and the use of resources.

• *Honesty* in developing, undertaking, reviewing, reporting and communicating research in a transparent, fair, full and unbiased way.

- *Respect* for colleagues, research participants, society, ecosystems, cultural heritage and the environment.
- Accountability for the research from idea to publication, for its management and organisation, for training, supervision and mentoring, and for its wider impacts.



# **Common guidelines**

published in April 2015

#### JOINT PROCESS (2014/2015):

# Discussed with and approved by (then) 37 member organisations



ÖSTERREICHISCHE AGENTUR FÜR WISSENSCHAFTLICHE INTEGRITÄT





# Research Misconduct & breaches of GSP rules: most frequent problems

#### OeAWI guidelines for GSP



#### Research misconduct refers to

- conscious or
- grossly negligent

violations of the Standards of GSP (§ 2).



#### OeAWI guidelines for GSP

ÖSTERREICHISCHE AGENTUR FÜR WISSENSCHAFTLICHE 0/ INTEGRITÄT **Richtlinien der** Österreichischen Agentur für wissenschaftliche Integrität zur Guten Wissenschaftlichen Praxis Austrian Agency for Research Integrity **Cuidelines** for Good Scientific Practice Stand | Effective (2015)



- Fabrication of data
- Falsification of data
- Plagiarism



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#### OeAWI guidelines for GSP



- Unjustified refusal to provide access to primary and original data
- Obstructing the research activities of other scientists/researchers
- Sabotaging research activities
- Providing inaccurate information in a grant proposal which may place competing scientists/researchers at a disadvantage
- Creating disadvantages to the career advancement of whistle-blowers



#### OeAWI guidelines for GSP



Research misconduct can also include involvement in other persons' violations, e.g.:

- Active involvement in the misconduct of others
- Co-authorship of publications based on falsified data or otherwise generated through violations of the GSP-standards
- Neglect of supervisory obligations



## Out of scope of these rules....

- Statements within the scientific discourse
- Errors made in good faith

Mobbing

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Sexual harassment



# How to foster Research Integrity?

What can a research/funding institution do?

- Aspirational guidance needs to be translated to concrete policies
- With the goal to support researchers and institutions
- The plan should be comprehensive and tangible to address various dimensions of RI



# From principles to practice

#### How to develop a Research Integrity Promotion Plan



**Richtlinien der** Österreichischen Agentur für wissenschaftliche Integrität zur Guten Wissenschaftlichen Praxis

> Austrian Agency for Research Integrity **Guidelines for Good** Scientific Practice

Stand | Effective (2015)

All research performing organizations (RPOs) and research funding organizations (RFOs) should have a RIPP

- The RIPP should outline the steps that the RPO or RFO will take to promote research integrity in the context of its mission and disciplinary focus
- It should address a number of RI topics and outline policies for how these topics will be handled.

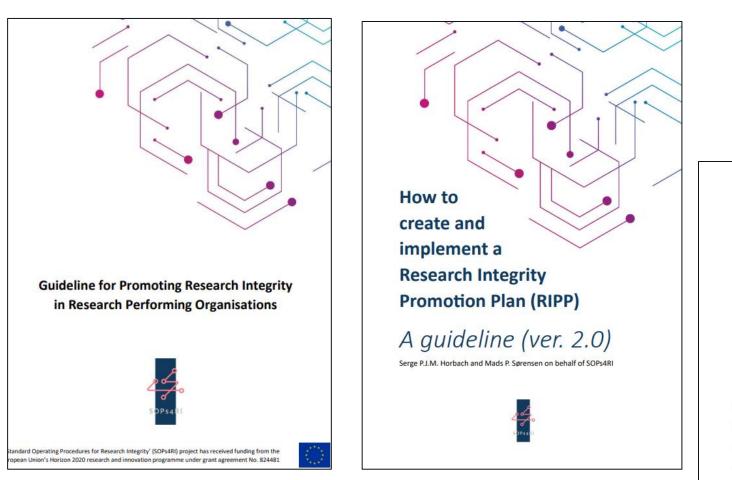


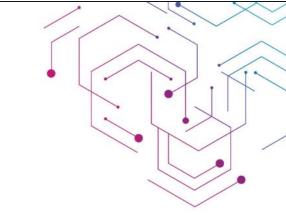


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#### The way forward: Research integrity by design







TEMPLATE FOR WRITING A RESEARCH INTEGRITY PROMOTION PLAN FOR RESEARCH PERFORMING ORGANISATIONS

